

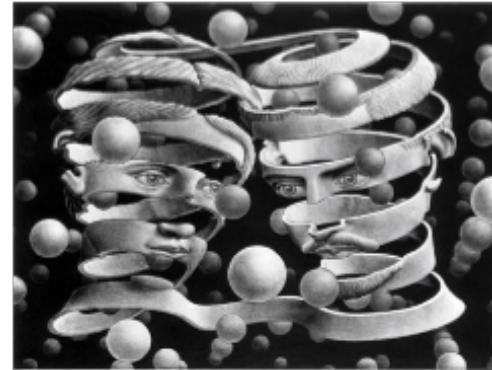
Today's Lecture

1/16/09

- Identifying Arguments
- Arguments vs. Non-Arguments
- Well-crafted Arguments

Diversity of speech acts

- We question
- We command
- We curse
- We pray
- We sing
- We tell stories
- We make promises
- We lie
- We report things
- We tell jokes



None of these are arguments in our technical sense:

A set of statements where some of the statements (premises) are intended to support another (conclusion).

Mitch Hedberg



- My friend asked me if I wanted a frozen banana, I said "no, but I want a regular banana later, so ... yeah".
- I'm against picketing, but I don't know how to show it.
- One time, this guy handed me a picture of him, he said, "Here's a picture of me when I was younger." Every picture of you is when you were younger. "Here's a picture of me when I'm older." "You son-of-a-bitch! How'd you pull that off? Lemme see that camera!"

Argument Spotting

Conclusion indicators

so thus
therefore consequently
hence which proves that
implies that we may infer that

- **Therefore**, there is methane on Mars.
- **Consequently**, some light fixtures are dangerous.
- **We may infer**, then, that consciousness is not

Premise indicators

.
because after all
since the reason is that
for based on the fact that
as

- **After all**, infants acquire their linguistic competence very early on.
- Frank should enter the computer generated reality, **as** his life is full of misery and woe.

Nota bene

Sometimes you find the indicator words even if a passage is not an argument.

- Mia is as hungry **as** a wolf.
- He made a face like **thus**. [speaker gestures]
- We haven't heard that beat **since** the 80s.
- **After all** the years going to school, Max still feels that he knows nothing.

Arguments
≠
Unsupported Assertions

an assertion

- Photosynthesis is a metabolic pathway that converts carbon dioxide into organic compounds, especially sugars, using the energy from the sunlight.

a
report

- Climate model projections indicate that global surface temperature will likely rise a further 1.1 to 6.4 °C (2.0 to 11.5 °F) during the twenty-first century. The uncertainty in this estimate arises from use of differing estimates of future greenhouse gas emissions and from use of models with differing climate sensitivity. Another uncertainty is how warming and related changes will vary from region to region around the globe. Although most studies focus on the period up to 2100, warming is expected to continue for more than a thousand years even if greenhouse gas levels are stabilized. This results from the large heat capacity of the

A **report** is =_{df} a set of statements intended to provide information about a situation, topic, or event.

Reports can contain a bunch of information without thereby being an argument.

Arguments

≠

Illustrations

illustrations

- Angiosperms are plants whose reproductive cycles involve flowers. For example, oak trees and palm trees are angiosperms.
- There were many celebrated civil rights activists from the 60s. Martin Luther King Jr. is one such individual.
- Modus ponens is a valid argument form. For instance, the following is a valid argument:
 - If Jonny is in England, then he is not in SB
 - Jonny is in England
 - So he is not in SB

An **illustration** =_{df} a statement together with an explanatory or clarifying example.

Sometimes it is hard to tell. Consider (from pg 64)

(*) Whole numbers can be represented as fractions. Thus, 2 can be represented as $\frac{8}{4}$ and 5 can be represented as $\frac{15}{3}$.

Note that citing these facts about 2 and 5 are being used to illustrate a feature of whole numbers – the last sentence is not a conclusion.

Of course, you can cite examples in an argument.

- Gilbert said that no mammals can fly. But that is not right. For example, bats can fly.
- You said that the bank is never open after noon on Saturday. That is false. Look, here it is, Saturday after noon, and the bank is open.

Arguments
≠
Explanations

Explanations

- Max has a headache because he did not drink enough water.
- My cat scratched at the door because he wanted to go out and believed that by scratching at the door he could best achieve that end.
- The liquid exploded because it was on the burner for too long.

An **explanatory statement** is =_{df} a statement that provides a reason for the occurrence of some phenomenon.

Most explanations employ the word 'because'. This can be confusing, as 'because' is also found to be used in an argumentative sense.

One way to think about it: there are (at least) two senses of the word 'because'.

SENSE 1 (EXPLANATIONS)

tracks a causal relation
between two states

e.g.

I am holding my head
because that will stop the
bleeding.

The plant sprouted **because**
it had water and sunlight.

SENSE 2 (ARGUMENTS)

picks out a reason-providing
relation between premises
and a conclusion

e.g.

Kobe is tall **because** most if
not all basketball players are
tall and Kobe is a b-ball
player.

Relativism about truth is
false **because** it is self-

Also, please note

Explanations
Can Occur as
Conclusions

Mr. Body was poisoned at the party. The only people near his drink were Plum, Peacocke, and Scarlet. Both Peacocke and Scarlet have no access to poison, and Plum has a poison lab. Also, given that Plum always loathed Mr. Body, the best explanation is that Plum is the one who poisoned Mr. Body.

Arguments
≠
Conditionals

Conditionals

- If you build it, they will come.
Contrast with:
 - You build it.
 - Therefore, they will come.
- If life is but a dream, then we are just the imagination of ourselves.
- If I keel over, we will know it was Plum who poisoned me.

Again, there are exceptions

Alex tells me:

(*) John, if you want to avoid head damage you should wear a helmet when you help people move.

In many contexts it will be implicit that I want to avoid head damage, and so Alex is offering a modus-ponens style argument.

1. You want to avoid head damage. (**implicit**)
2. If you want to avoid head damage you should wear a helmet when you help people move.
3. Thus, you should wear a helmet when you help people move.